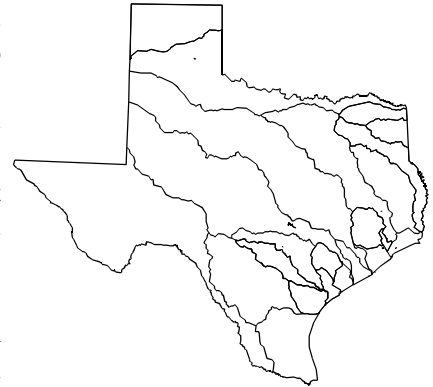


Chapter 6

Transition to Implementation

Schedule for Framework Implementation

Successful implementation of the statewide watershed management approach will require coordination between OWRM programs and various stakeholders. To effectively incorporate the framework for watershed management into their day-to-day activities, OWRM water quality management program staff must achieve a thorough understanding of this guidance document. OWRM managers established a specific schedule of tasks to be undertaken in fiscal year 1997 that will ensure full understanding and subsequent implementation of this guidance document.



1. Team leaders and section managers of the Water Planning and Assessment Division, the Wastewater Permits Section, OWRM division directors, and the Water Policy Division reviewed and commented on the draft guidance document from September 1 through October 31, 1996. Individual meetings were held with the various team leaders of the programs identified in Chapter 5 to discuss the implications of the guidance document in detail.
2. EPA staff also reviewed and commented on the draft guidance document from September 1 through October 31, 1996.
3. Meetings were held in January 1997 to obtain feedback and further support for the statewide approach from the TNRCC commissioners and executive director.
4. During the month of December 1996, the guidance document was revised to incorporate comments from TNRCC and EPA staff. Based on these comments, TNRCC management will meet with the EPA in April 1997 to finalize agreements for those operating procedures which will be adopted by the EPA in support of the watershed management approach.

These tasks are aimed at ensuring that OWRM management and staff, as well as EPA staff, have a thorough understanding of the requirements and expectations associated with the watershed management approach. To fully incorporate the guidance of this document into the agency culture, the TNRCC will revise existing standard operating procedures and program work plans, which are the basis for allocation of technical and administrative staff resources and funding within the commission. Consequently, the OWRM will select a small work group to initiate and complete two critical tasks to ensure that the guidance document is incorporated into day-to-day operating procedures.

1. The OWRM will adopt revised standard operating procedures by December 1997.
2. Participating OWRM programs will adjust existing work plans for fiscal years 1998 and 1999 to address activities included in the basin management schedule.

Adjusting existing work plans for fiscal year 1998 and beyond will require each OWRM team to determine the appropriate level of effort and resources to commit in support of the watershed management approach. A percentage of time and resources would also be reserved by each OWRM team to address issues and needs outside of the basin groups being targeted in any given year. OWRM division directors, section managers, and basin coordinators will assist team leaders during the decision-making process as teams prepare their work plans.

Figure 6-1. Implementation of the Statewide Basin Management Schedule

River Basins*	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
GROUP A: Canadian River, Red River, Sulphur River, Cypress Creek, Sabine River, Sabine Pass, Neches River & Trinity River	IMPLEMENTATION	SCOPING					SCOPING	
		DATA COLLECTION			BASELINE MONITORING		DATA COLLECTION	
			ASSESSMENT & TARGETING					
				STRATEGY DEVELOPMENT				
						IMPLEMENTATION		
GROUP B: Trinity River (continued) San Jacinto River		IMPLEMENTATION	SCOPING					SCOPING
		BASELINE MON.	DATA COLLECTION			BASELINE MONITORING		DATA COLL.
				ASSESSMENT & TARGETING				
					STRATEGY DEVELOPMENT			
							IMPLEMENTATION	
GROUP C: San Jacinto River (cont.) San Jacinto–Brazos Coastal, Neches–Trinity Coastal, Trinity–San Jacinto Coastal, Bays & Estuaries			IMPLEMENTATION	SCOPING				
		BASELINE MONITORING		DATA COLLECTION			BASELINE MONITORING	
					ASSESSMENT & TARGETING			
						STRATEGY DEVELOPMENT		
								IMPLEMENTATION
GROUP D: Brazos River, Brazos–Colorado Coastal, Lavaca River, Colorado River, Bays & Estuaries		ASSESS & TARGET	STRATEGY DEV.	IMPLEMENTATION	SCOPING			
		BASELINE MONITORING			DATA COLLECTION			BASELINE MON.
						ASSESSMENT & TARGETING		
								STRATEGY DEV.
GROUP E: Colorado (cont.), Guadalupe, San Antonio, Nueces & Rio Grande Rivers, San Antonio–Nueces Coastal, Colorado–Lavaca Coastal, Lavaca–Guadalupe Coastal, Nueces–Rio Grande Coastal, Bays & Estuaries, Gulf of Mexico						SCOPING		
		DATA COLLECTION		BASELINE MONITORING		DATA COLLECTION		
		ASSESSMENT & TARGETING					ASSESS & TARGET	
				STRATEGY DEVELOPMENT				
						IMPLEMENTATION		

*Note: Chronological order of river basins is derived from the Title 30 Texas Administrative Code § 305.71 Permit-by-Basin rule. Wastewater permits for each group of basins are issued to coincide with the implementation phase.

Entering the Statewide Basin Management Schedule

Sequencing the day-to-day activities of participating TNRCC programs to be synchronized with the statewide basin management schedule will require a gradual transition (see Figure 6-1). The TNRCC will initiate activities in fiscal year 1997 for Basin Groups A, C, and E. Basin Group B will be phased in during fiscal year 1998, Basin Group C in fiscal year 1999, and Basin Group D in fiscal year 2000. TNRCC program operations supporting the watershed framework will be reduced in Basin Groups C and D over the next three years to ongoing activities (i.e., technical assistance and implementation activities not tied to the basin management cycle schedule), providing staff with more time to begin focusing certain activities (e.g., strategic monitoring, CWA §305(b) assessment, NPS program update, modeling, and action plan development) within a limited number of basins. Schedules for phasing in activities over the next three fiscal years are summarized below by basin group.

Fiscal Year 1997

- 💧 *Basin Group A:* Activities will begin with the scoping phase. Initial steps will involve the preparation of a comprehensive water quality monitoring strategy to address §303(d) listed waters within Group A basins, and preparing for basin steering committee meetings to discuss priorities for watershed action plan development and to obtain input on strategic data collection and monitoring needs. The comprehensive water quality monitoring strategy will be developed through a coordinated effort involving the basin coordinator, SWQM Team, Field Operations Division, Texas Watch, the Clean Rivers Program Team, Water Quality Standards Team, and the Toxicity Evaluation Team.
- 💧 *Basin Group C:* Activities will begin in the strategy development phase of the cycle. Based on previous basin assessments, the OWRM will work with the basin steering committees to select a few priority watersheds suitable for action plan implementation. Specifically, the OWRM and CRP contractors will recruit local stakeholders interested in obtaining CWA §319 grant funds for implementing nonpoint source management projects in priority watersheds. TMDLs for certain metals will also be completed for priority watersheds in Group C. These efforts will be limited in number and scope for the first iteration of the cycle, because strategic monitoring to fill information gaps and to support management TMDL modeling will not have been performed. However, the reduced scale is probably wise from a management perspective, given that this will be the first time that priority watershed action plans are developed. The Nonpoint Source Program, SWQM, Modeling, and CRP Teams will have the primary responsibility for implementing these tasks in Group C basins.
- 💧 *Basin Group E:* Activities will begin in the strategic data collection and monitoring phase of the cycle. Although strategic monitoring plans will not have been formally reviewed by basin committees (i.e., through a scoping phase), refinements to traditional monitoring programs for the OWRM have already been put in place by the SWQM Team, such that fiscal year 1997 monitoring activities will focus on Group E basins. Thus, participants will be able to take advantage of additional information going into the assessment and targeting phase to support priority watershed action plan development.

Fiscal Year 1998

- 💧 *Basin Group B:* Activities will begin with the scoping phase of the cycle. The statewide §303(d) list prepared in fiscal year 1997 will be used to establish priorities. A comprehensive water quality monitoring strategy to address §303(d) listed waters within Group B basins will be presented to the basin steering committee to reach consensus on priorities for watershed action plan development and to obtain input on strategic data collection and monitoring needs.
- 💧 *Basin Groups A, C, and E:* Activities continue according to schedule. Staff support strategic data collection and monitoring for Basin Group A; issuance of wastewater permits and awarding CWA §319 grant funds is the focus for Basin Group C; and data collection continues, and assessment and targeting begin, for Basin Group E.

Fiscal Year 1999

- 💧 *Basin Group C:* Activities will begin with the scoping phase of the cycle. The §303(d) list will need to be

updated for this basin group in late fiscal year 1998 to establish priorities for monitoring, TMDL development, and strategy development during the next five-year cycle.

- 💧 *Basin Groups A, B, and E:* Activities continue according to schedule. Data collection continues, and assessment and targeting begin for Basin Group A. Staff support strategic data collection and monitoring for Basin Group B, and strategy development is the focus for Basin Group E.
- 💧 *Basin Group D:* Implementation is scheduled for Group D, and the primary activity will involve the issuance of wastewater permits and the potential awarding of CWA §319 grant funds.

Fiscal Year 2000

- 💧 *Basin Group D:* Activities will begin with the scoping phase of the cycle. The §303(d) list will need to be updated for this basin group in late fiscal year 1999 to establish priorities for monitoring, TMDL development, and strategy development during the next five year cycle. With all phases being activated in 2000, this year will mark the first year of complete implementation of the approach statewide.
- 💧 *Basin Groups A, B, C, and E:* Activities continue according to schedule. Strategy development is initiated in Basin Group A to establish pollution control responsibilities and reduction goals for priority watersheds. Data collection and special studies are being completed, and assessment and targeting begin for Basin Group B. Staff support strategic data collection and monitoring for Basin Group C, and implementation is the focus for Basin Group E.

These summaries are intended to give OWRM staff a quick overview of how implementation will proceed. Details regarding specific activities and schedules can be found in Table 5-1 . Program activity worksheets have been developed to help programs establish work plans for upcoming fiscal years.

Additional Elements Necessary for Framework Refinement

In addition to revising operating procedures and program work plans, there are a number of other key elements which the OWRM will need to prepare to fully implement the statewide watershed management approach.

TNRCC Rules and Guidance

1. The CRP Team and BEAT will collaborate with the basin coordinator and other OWRM teams, where appropriate, to prepare new guidance manuals covering all five phases for CRP contractors. The CRP Team will work closely with CRP contractors to obtain their input and build a strong understanding of the new guidance. The guidance will list specific tasks, roles, responsibilities, schedules, and outcomes associated with each phase of the basin management cycle (April 1997).
2. TNRCC rules and corresponding guidance will be prepared by CRP staff to revise rosters, functions, roles, and responsibilities for basin steering committees and priority watershed subcommittees. Public input will be sought during the development of the rule package and subsequent guidance (June 1997).
3. TNRCC rules and corresponding guidance will be prepared by CRP staff to revise the current reporting requirements under the CRP. Rules and guidance will outline specific responsibilities of the CRP contractors, basin steering committees, and priority watershed subcommittees as they pertain to the documentation of water quality assessments, strategy development through watershed action plans, and fiscal reporting. The recommended format and content of the different reports required will be included in the rules and guidance (June 1997).
4. The Modeling Team will collaborate with other OWRM teams to prepare guidance and quality assurance/quality control procedures for water quality modeling completed by organizations outside the TNRCC. The guidance and QA/QC protocols will be developed to ensure that modeling efforts conducted by

any organization outside the TNRCC will be scientifically valid and can support the future development of TMDLs for specified water bodies (July 1997).

Operating Agreements

1. The TNRCC will meet with and request formal written agreements from the EPA for changes to operating procedures associated with specific CWA reporting requirements. The specific details of TNRCC's proposed changes to reporting requirements are summarized later in this chapter (April 1997).
2. The TNRCC will initiate discussions with the EPA to alter the traditional linear approach to administering and implementing its CWA §319 Nonpoint Source Program. Historically, this program has required that projects adhere to a linear sequence of tasks:
 - 💧 installation of a best management practice (BMP)
 - 💧 operation and maintenance of the BMP
 - 💧 monitoring the effectiveness of the BMP

Specifically, the commission will begin to allocate §319 funds on a negotiated process that targets priority watersheds in specific basins as determined by the basin management schedule. Negotiated work plans would lead to funding projects for one- or two-year periods rather than for three to five years. In other words, in one year §319 funds could be used to support assessment activities in one group of basins, or implementation of BMPs in another. The TNRCC will request that nonpoint source assessment activities conducted in one group of basins by CRP contractors be recognized as matching effort for the award of §319 implementation funds committed to another group of basins. The commission will also request changes to the requirements for a formal public review and comment period associated with updating the NPS assessment report. It is expected that this requirement can be fulfilled through the expanded role the CRP basin steering committees will play throughout the phases of the basin management cycle. These changes are necessary to more effectively support the timing and geographic focus of the TNRCC statewide basin management schedule (December 1996).

3. A major task for OWRM staff is to establish a consistent process for selecting priority watersheds. Priority watersheds are those which will be targeted for the development and implementation of TMDLs or other management strategies. To complete this task, OWRM staff will refine the existing CRP process for ranking water bodies and the TNRCC's process for preparing the §303(d) list. The SWQM, CRP, NPS, Standards, Modeling, Ecosystem Research, Border Environmental Assessment, and Toxicity Evaluation Teams will develop a list of criteria and the rationale for the selection of priority watersheds for each group of basins. The selection of the priority watersheds for each group of basins will be based on the §305(b) Report, including the interim NPS assessment section, the Clean Rivers program summary reports, and the §303(d) list derived from these reports. Because the TNRCC and participants in the CRP do not have the resources to address each water quality issue in every river basin, a consistent process must be established for selecting specific watersheds within a group of basins (March 1997).

Research

Currently, the OWRM is administering an EPA grant to evaluate and establish an effective methodology for delineating geographic units, or watersheds, for every river and coastal basin in Texas. The project will test the methodology in three different basins and will result in the development a software system to assist water resource managers in tracking watershed-based projects, funding, and water quality improvements. Over the next two-year period, this project will provide important support features to the watershed management approach (September 1997).

Support Structure Components

The implementation of the support structures summarized in Chapter 4—basin coordinators, basin steering committees, priority watershed subcommittees, and information management—will require significant commitments on behalf of the TNRCC. The extent of these commitments will unfold over the next 12 to 18 months as the OWRM addresses the following issues and tasks.

Basin Coordinators

The establishment of basin coordinator positions will be evaluated by TNRCC management during fiscal year 1997. Based on discussions to date, six positions are recommended to support the extensive and ongoing coordination among teams and stakeholders. Five positions would be used for basin coordinators, and one position will provide administrative support to the coordinators. The positions could be phased in over the next three years as the statewide schedule is implemented. Two coordinators and one administrative assistant will be needed in fiscal year 1998, two more coordinators in fiscal year 1999, and one more coordinator in 2000. The positions could be newly established positions or existing positions reassigned to handle new duties that support the watershed management approach. These positions will require individuals with a broad range of knowledge and experience in water quality programs, management, and dispute resolution. Establishing the positions at a state grade of 19/1 or greater is recommended to attract qualified staff. A portion of the funding necessary to support these positions would most likely come from CWA §104(b)(3) grants.

Basin Steering Committees

The additional roles and responsibilities that will be adopted by the basin steering committees will evolve through a series of meetings with the CRP contractors and a select group of existing basin steering committees throughout fiscal year 1997. As outlined in Table 6-1, the TNRCC will work to develop rules and corresponding guidance to strengthen the roles and responsibilities of basin steering committees.

Priority Watershed Subcommittees

The TNRCC recognizes the importance and benefits of establishing an effective forum for increasing public involvement throughout the basin management cycle. The establishment of priority watershed subcommittees will be an evolving process, which will vary from basin to basin. The OWRM will target Group E basins to begin formulating the guidance associated with the recruitment, administration, and responsibilities of the priority watershed subcommittees. Since the success of priority watershed subcommittees will depend largely on local interest in water quality issues, the OWRM will work closely with the existing basin steering committees of Group E basins to select a watershed(s) that could serve as an effective test for strengthening local participation. The planning and outreach efforts associated with the development of priority watershed subcommittees will begin in June 1997.

Information Management

Refinement of operating procedures to support data management and GIS applications for the watershed management approach will also need to occur in fiscal year 1997. It is recommended that an internal work group be formed to address the following key issues.

1. Evaluate how existing information management systems and capabilities will meet identified information management needs, and note where gaps in support capabilities exist. (Information from Figure 4-2 should be provided to the work group to help members understand support needs throughout the basin management cycle.)
2. Identify agency and partner lead and supporting roles and responsibilities to carry out the information management functions of the watershed management approach.
3. Provide recommendations for refinements of information management procedures within the OWRM to function accordingly.

Table 6-1. Additional Elements Necessary for Framework Refinement

Task	Anticipated
TNRCC RULES AND GUIDANCE	
1. OWRM preparation of new guidance manuals covering each of the five phases of the basin management cycle for review, comment, and implementation by the CRP contractors	April 1997
2. Development of TNRCC rules and corresponding guidance for roles and responsibilities of basin steering committees and priority watershed subcommittees	June 1997
3. Development of TNRCC rules and corresponding guidance to revise reporting requirements of the Clean Rivers Program	June 1997
4. Preparation of draft guidance and QA/QC protocols for water quality modeling completed by entities outside of the TNRCC to support TMDL development	July 1997
OPERATING AGREEMENTS	
1. TNRCC request and approval from EPA for changes to operating agreements associated with specific CWA reporting requirements.	April 1997
2. TNRCC will initiate discussions to seek approval from EPA for changes to the administration and implementation of the TNRCC Nonpoint Source Pollution Program in support of the watershed management approach	December 1996
3. OWRM refinement of the process and rationale for selecting priority watersheds based on the CWA §305(b) Report, Nonpoint Source Assessment Report, CRP assessment updates, and the §303(d) list	March 1997
RESEARCH	
OWRM coordination of a grant to develop and adopt a consistent methodology for delineating watersheds and the development of a software system to track watershed-based projects	September 1997
SUPPORT STRUCTURE COMPONENTS	
1. Evaluation by TNRCC management of need and responsibilities for basin coordinator positions to support the watershed management approach	June 1997
2. Development of TNRCC rules and corresponding guidance for roles and responsibilities of basin steering committees	June 1997
3. OWRM will target Group E basins to begin formulating the guidance associated with the recruitment, administration, and responsibilities of the priority watershed subcommittees	September 1997
4. Recommendations from OWRM internal work group on refinements to operating procedures for data management and GIS applications to support the watershed management approach	November 1997

Keys To Success

Leadership

Successful implementation of the watershed management approach will depend on the effectiveness and consistency of leadership throughout the five-phase cycle. With the adoption of the watershed management approach, the TNRCC seeks to evolve in its traditional role as regulator and enforcer. The TNRCC has, for the moment, assumed a leadership role in coordinating watershed management, overseeing the implementation of the basin management cycle, and synthesizing the strategy with the statewide schedule. OWRM division directors, basin coordinators, and staff of

participating programs will provide primary leadership by helping other parties interested in watershed management synchronize their activities with the basin management schedule.

Consistent and effective leadership is also essential at the regional and local level. Leadership responsibilities and functions will be a key requirement for basin steering committees and priority watershed subcommittees. The responsibilities and functions of basin steering committees and priority watershed subcommittees will be focused on providing public input in a timely fashion, strengthening participation, conducting efficient and effective meetings, and coordinating local outreach efforts. Recommendations will be made to ensure that individual priority watershed subcommittees establish a leadership structure and select a leader from within the community who has a stake in the outcome of the watershed action plan.

Commitment

The TNRCC's statewide watershed management approach is not mandated by statute or regulation. The long-term success of implementing the watershed management approach is derived from the TNRCC's commitment to the following tasks:

1. Incorporating the guidance summarized in this document through its standard operating procedures
2. Adjusting participating OWRM program work plans to accommodate the basin management cycle and the public input process
3. Developing TNRCC rules and guidance to coordinate the activities and outputs of the CRP contractors with the statewide basin management schedule
4. Developing TNRCC rules and guidance to refine the functions and responsibilities of basin steering committees and priority watershed subcommittees
5. Establishing six full-time employees as basin coordinators over the next four years

The TNRCC will also improve its ability to provide guidance and technical assistance to basin steering committees and priority watershed subcommittees. Agency budget allocations will, to the greatest extent possible, reflect priorities identified through the basin management cycle and public input received from the basin steering committees and priority watershed subcommittees.

Various commitments will also be necessary on the part of CRP contractors and the basin steering committees and priority watershed subcommittees. Participants on basin steering committees and priority watershed subcommittees serve both as representatives of their interest group or organization and partners in the development of basin and watershed plans. To support the decision-making process, participants must be empowered to make decisions on behalf of the interests they represent and to take those decisions back to their community, corporation, or government entity for implementation. The watershed management approach requires a commitment on the part of stakeholders to institute management strategies in a spirit of fairness and cooperation. Through collaboration between participants, lasting partnerships are built which focus on environmental results rather than individual program results.

Steering committee members represent diverse public and private interests. Meaningful participation on the steering committee requires stakeholders to speak on behalf of their community, agency, or firm at the negotiating table. Representatives must not only commit their time to the steering committee, but must be empowered by their organizations, both public and private, to commit the resources, information, expertise, and authority needed to develop and/or implement plans. Decisions based on consensus are made by the steering committee; therefore, stakeholder representatives must ensure that the group they represent will use their regulatory or management powers to abide by the agreements reached by the steering committee.

Adjusting Federal and State Reporting Requirements to Support the Statewide Watershed Management Approach

The watershed management approach provides the framework for day-to-day activities of participating OWRM programs to become more efficient over time. Reducing duplication among federal and state reporting requirements is an important objective for the OWRM. The OWRM will benefit through the consolidation of reporting requirements fostered by the watershed management approach.

Various phases of the watershed management approach will affect certain reporting requirements of current water quality management programs within the OWRM. Specifically, the five-phase approach will alter the traditional periods for publishing:

- 💧 *State of Texas Water Quality Inventory Report* [CWA §305(b) Report]
- 💧 CWA §303(d) List
- 💧 Nonpoint source assessment report [CWA §319]
- 💧 Nonpoint source management plan [CWA §319]
- 💧 Clean Rivers Program basin assessment reports
- 💧 TNRCC Clean Rivers Program water quality assessment summary report

The following section summarizes the proposed changes these specific documents will undergo, and Figure 6-2 shows the relationships in timing among the various reporting requirements discussed below. Each proposed change supports the goal of improving the administrative efficiency of the TNRCC's water resource programs. These proposed recommendations are currently pending formal approval at the federal and state level.

State of Texas Water Quality Inventory Report (CWA §305(b) Report)

Currently, the *State of Texas Water Quality Inventory* (CWA §305(b) report) is prepared by the SWQM Team and submitted to the EPA biennially in even-numbered years in accordance with §305(b). This report enables the public, local governments, state agencies, the Texas Legislature, the EPA, and Congress to evaluate water quality in Texas. Various changes to the future development of the document include:

- 💧 The *State of Texas Water Quality Inventory* will move from a two-year to a five-year reporting cycle, however, interim documentation will be prepared each year for specific groups of basins as determined by the statewide basin management schedule. The report will consolidate the nonpoint source pollution assessment report and the Clean Rivers Program assessment data. The interim documents will be completed near the end of Phase 5 to ensure their availability for setting priorities in Phase 1 for each group of basins. The SWQM Team will begin focusing on a single group of basins beginning with fiscal year 1997. After four consecutive years, the interim documents will be rolled into one statewide summary report for publication. The next statewide report will be published in March 2001.
- 💧 Although the purpose of the document remains the same, its content will be expanded to incorporate the nonpoint source assessment report, which has traditionally been prepared under separate cover. Coordination between the SWQM and Nonpoint Source Program Teams will be crucial during Phases 3 and 4 to ensure nonpoint source data and information are efficiently and accurately incorporated into the interim water quality inventory reports.

CWA §303(d) List

Currently, under CWA §303(d), the TNRCC is required to identify and set priorities for those water bodies requiring TMDLs every two years. Traditionally, the list has been prepared by the SWQM and Modeling Teams and submitted to the EPA biennially on even-numbered years. In previous years the list has been prepared as a statewide list and incorporated a numerical ranking to establish priorities among water bodies. Significant changes recommended for the future development of the §303(d) list include:

- 💧 The §303(d) list will change from a two-year, statewide list to an annual update on only a portion of the state. Beginning with fiscal year 1999, the §303(d) list will be updated in a portion of the state as determined by the basin management schedule. The list will be prepared during the implementation phase for each group of basins immediately following the §305(b) update. The interim lists will be completed near the end of Phase 5 to ensure its availability for setting priorities in Phase 1 for each group of basins. The list will no longer have numerical ranking and will be developed through a cooperative effort involving the SWQM, Modeling, NPS, CRP, and Standards Teams. Coordination with the EPA will be stressed throughout the development of the list and the public notification process.
- 💧 The purpose of the list will also change. The list will be used as a primary decision-making tool for water quality management by the TNRCC. The list will be used by the TNRCC to recommend priorities for future monitoring, TMDL development, intergovernmental coordination, and §319 nonpoint source management projects. Nonpoint source impacts to water bodies, which have traditionally been identified under the TNRCC's nonpoint source assessment report, will be identified in the §305(b) and on the §303(d) list. The identification and listing on the §303(d) list of water bodies affected by nonpoint source pollutants will allow the TNRCC and local organizations to target CWA §319 funds toward high-priority nonpoint source management projects. In subsequent years, the TNRCC will also coordinate with the EPA to establish practical procedures for adding water bodies to or deleting them from the §303(d) list.

Nonpoint Source Assessment Report

CWA§319 specified requirements for state nonpoint source pollution programs, including provisions for preparation and submittal of a nonpoint source pollution assessment report and a management program for the state. The statute and associated guidance specifies that the state's assessment report must identify waters that were degraded by nonpoint source pollution, and characterize the sources that contribute to those impacts. The management program represents the state's strategy for addressing the nonpoint source pollution impacts identified in the assessment report. Various changes to the future development of the document include the following:

- 💧 In the future, the statewide nonpoint source assessment report will be based on the same five-year reporting cycle that guides the *State of Texas Water Quality Inventory*. Interim documents will be prepared for specific groups of basins as determined by the statewide basin management schedule.
- 💧 The purpose of the document remains the same. Coordination between the SWQM and Nonpoint Source Program Teams will be crucial during Phases 3 and 4 to ensure nonpoint source data and information are formatted appropriately for incorporation into the interim water quality inventory reports.

Nonpoint Source Management Plan

Future development of the document will include the following:

- 💧 The statewide Nonpoint Source Management Plan will be based on the same five-year reporting cycle as the *State of Texas Water Quality Inventory*. Interim documents will be prepared for specific groups of basins as determined by the statewide basin management schedule. These interim documents will begin with fiscal year 1999, because a statewide nonpoint source management plan update will be published by the Nonpoint Source Program Team in fiscal year 1997.
- 💧 The purpose of the document remains the same. Coordination among the Modeling, Watershed Management, and Nonpoint Source Program Teams will be crucial during Phases 3 and 4 to ensure nonpoint source data and information supports the recommended management strategies identified in Phase 4 for priority watersheds.

Figure 6-2. Schedule for Reporting Requirements Under the Statewide Basin Management Schedule

BASINS	FY 1996	FY 1997 (Legislative Session)	FY 1998	FY 1999 (Legislative Session)	FY 2000	FY 2001 (Legislative Session)	FY 2002	FY 2003 (Legislative Session)	FY 2004	FY 2005 (Legislative Session)	FY 2006
Group A	Existing commitments	Prepare OWRM FY 1998-1999 work plan	Data Collection	Assessment	Strategy	Implementation	Scoping/	Data Collection	Assessment	Strategy	Implementation
Group B				Data Collection	Assessment	Strategy	Implementation	Scoping/	Data Collection	Assessment	Strategy
Group C					Data Collection	Assessment	Strategy	Implementation	Scoping/	Data Collection	Assessment
Group D		Existing commitments	Develop customized guidance between			Data Collection	Assessment	Strategy	Implementation	Scoping/	Data Collection
Group E			Assessment	Strategy	Implementation	Scoping/	Data Collection	Assessment	Strategy	Implementation	Scoping/
Statewide			Continued statewide baseline monitoring and ongoing implementation efforts								
CRP CONTRACTORS REPORTING		Last traditional two-year CRP		CRP Update to the Legislature		CRP Update to the Legislature		CRP Update to the Legislature		CRP Update to the Legislature	
Data to TNRCC			Semi-Annual Basin Electronic Reporting								
TNRCC REPORTING	Last traditional two-year State 305(b) Report	Last traditional CRP Statewide Summary Report				First five-year Combined State 305(b) (December)					Second five-year Combined State 305(b) (December)
303(d) list	New statewide list	Update statewide list	Update, priority to Group C	Update, priority to Group D	Update, priority to Group E	Update, priority to Group A	Update, priority to Group B	Update, priority to Group C	Update, priority to Group D	Update, priority to Group E	Update, priority to Group A
NPS Assessment Report		Update to the NPS Assessment Report	Update, priority to Group E	Update, priority to Group A	Update, priority to Group B	Five- year NPS Assessment Report (Combined with 305(b))	Update, priority to Group D	Update, priority to Group E	Update, priority to Group A	Update, priority to Group B	Second five-year NPS Assessment Report (Combined with 305(b))
Data to EPA			Semi-Annual Basin Electronic Reporting								
FUNDING	Statewide	Statewide	Priority to	Priority to	Priority to	Priority to	Priority to	Priority to	Priority to	Priority to	Priority to

TNRCC Clean Rivers Program Water Quality Assessment Summary Report

Under §26.0135 of the Texas Water Code, the TNRCC is required to submit to the governor, lieutenant governor, and speaker of the house a summary report of basin water quality assessment reports prepared by CRP contractors. The report is currently prepared biennially, every even-numbered year. To minimize duplication of effort, the requirement for this summary report could be eliminated from the Texas Water Code, and the *State of Texas Water Quality Inventory* report could serve as the summary report for the water quality of the state.

Clean Rivers Program Basin Assessment Reports

Texas Water Code §26.0135(d) requires individual basin assessment reports be submitted to the TNRCC every even-numbered year. The purpose of these basin assessment reports is to provide a comprehensive, uniform analysis of surface water quality for each river basin and summarize public participation and strategic monitoring activities conducted through the CRP. Changes to these assessment reports are listed below.

- 💧 The existing two-year reporting cycle will be revised to allow basin summary reports to coincide with Phase 3. This change would move the current reporting to a five-year cycle. The purpose and content of the basin assessment reports will also change over the next three to four years as more data are collected. Rather than repeat basinwide historic data and/or duplicate status and trends information provided by the interim *State of Texas Water Quality Inventory* reports, the CRP documents will focus on reporting the assessment results of special studies, special basin projects, and changes in water quality which result from specific management strategies. The Clean Rivers Program Team will work closely with the CRP contractors throughout fiscal years 1997 and 1998 to revise the format for basin summary reports. Guidance will be flexible enough to ensure that reports meet the needs of CRP contractors and the basin steering committees.

Building on the Foundation

Future Opportunities for TNRCC Programs to Support Watershed Management

The watershed management approach provides a framework for improved collaboration between water quality programs and other natural resource programs within specific watersheds. Key interactions among OWRM surface water quality management programs that support watershed management have been identified by TNRCC staff. These interactions will be synchronized with the basin management cycle to address water quality issues in priority watersheds. As experience is gained through implementation of the watershed management approach, OWRM water quality management programs could begin to coordinate with additional environmental programs administered by the TNRCC and other state resource agencies. Through collaboration with other programs, additional resources could be leveraged to address priority watershed issues. The organizing principles for improved collaboration are focusing on water quality issues within specific watersheds and targeting regulatory and nonregulatory activities through the statewide basin management schedule.

Expanding cooperative and collaborative efforts to include programs which can support watershed protection will allow for a more comprehensive approach to watershed management. The OWRM anticipates opportunities to collaborate in the near future with the following programs:

- 💧 *Ground-Water Assessment Section:* A third dimension will be added to the watershed management approach by introducing groundwater concerns. In many watersheds, activities on the surface affect the quality of groundwater. The Ground-Water Protection Team is already developing a watershed management approach to groundwater protection by mapping areas of aquifer vulnerability throughout the state. The Ground-Water Nonpoint Source Team implements the state groundwater NPS management program and best management practices to control and prevent groundwater pollution, and coordinates

with the surface water NPS Program. In addition, the groundwater programs are directly involved in projects within specific watersheds, such as the regional aquifer protection project in the Nueces–Rio Grande Coastal Watershed and wellhead protection activities in the Lake Fork Reservoir Watershed. These specific watershed activities could ultimately affect selection of priority watersheds and may eventually be incorporated into watershed action plans.

- 💧 *Corpus Christi Bay National Estuary Program (NEP) and Galveston Bay Estuary Program:* Many fundamental principles of watershed management have already been implemented under the TNRCC's estuary programs. Formed in response to a federal statute designating coastal estuaries as critical aquatic resources requiring special management attention, the Corpus Christi Bay NEP and Galveston Bay Estuary Program must implement comprehensive conservation and management plans in cooperation with other federal, state, and local agencies, develop partnerships with the regulated community, and promote public participation. Participants in a statewide watershed management can learn from the planning experience of these programs, which are addressing cross-jurisdictional issues, assessing cumulative impacts of pollutants, and fostering public involvement. In addition, participants can share information within these regions. Opportunities to collaborate include working with the Environmental Assessment Team of the Corpus Christi Bay National Estuary Program to assess status and trends for wetlands and aquatic habitats, and the Public Participation Team of the Galveston Bay Estuary Program to provide environmental education and distribute results of scientific studies to the public.

In the future, a watershed management approach will have the opportunity to coordinate with other water resource programs within the OWRM. By coordinating with the following programs, the watershed management approach can share technical information, increase public participation, and expand opportunities for voluntary compliance and local action.

- 💧 *Public Drinking Water Section of the Water Utilities Division:* Protecting vulnerable public water supply wells and surface water intakes are critical concerns in watershed management. In implementing the Safe Drinking Water Act, the Public Drinking Water Section is responsible for maintaining drinking water quality from both surface water and groundwater supplies at levels needed to protect public health. In doing so, this section monitors and assesses human health risks, evaluates the vulnerability of water supplies to contamination, develops sampling protocols and related QA/QC procedures, and locates sources of contamination of drinking water. Sharing information across programs could prove critical in successfully addressing issues in priority watersheds within river basins, as well as providing the Public Drinking Water Section with valuable data on potential sources of contamination and aquifers at risk.
- 💧 *The Source Water Protection Program:* Administered by the Public Drinking Water Section, this program delineates wellhead protection areas or zones. The Source Water Protection Program recognizes that differences in geography and communities necessitate diverse remedies. The program does not mandate land use restrictions within critical zones, but it does identify threatening activities and promote voluntary compliance. Sharing ideas from the Source Water Protection Program through the watershed management approach on how to promote local initiatives, “self-help” projects, and interagency cooperation could provide an excellent opportunity for collaboration.
- 💧 *The Groundwater Protection Committee:* Composed of representatives from nine state agencies with groundwater protection authorities, this committee strives to identify areas where new or existing groundwater programs could be enhanced to prevent the degradation of the state's groundwater supplies. The Committee is required to develop and update a comprehensive groundwater protection strategy for the state that provides guidelines for preventing contamination, conserving groundwater, and coordinating interagency activities. The committee meets quarterly. Where appropriate, opportunities for coordination between the Groundwater Protection Committee and CRP basin steering committees should be pursued.
- 💧 *Texas Lake and River Cleanup Program:* The Texas Lake and River Cleanup Program is a volunteer effort of the TNRCC to involve civic organizations, private companies, schools, youth groups, and individuals in

cleaning waters and shorelines throughout Texas. Collaborating with this program to synchronize its efforts with the basin management schedule can generate public support for watershed management.

- 💧 *Agriculture Programs:* The OWRM's agriculture programs are responsible for issuing water quality permits and conducting the technical review for concentrated animal feeding operations. In addition, these programs provide technical support related to water quality goals and regulations to agricultural production systems in Texas, other state and federal agencies, and the general public. Since agricultural production systems can result in point and nonpoint source pollution, significant coordination and collaboration with agriculture programs and stakeholders is necessary for an effective watershed-based approach to water quality management.

Watershed management activities primarily center on water resource issues. However, opportunities may exist to collaborate with TNRCC programs such as those in waste management and pollution prevention, which can foster a more comprehensive approach to water resource protection.

- 💧 *Office of Pollution Prevention and Recycling (OPPR).* The OPPR works with industry, businesses, state and local governments, communities, educational institutions, civic organizations, and individuals across Texas to develop a nonregulatory approach to reducing pollution and waste. The OPPR serves as the state's clearinghouse for information on pollution prevention and waste reduction. To encourage cost-effective and voluntary solutions to problems identified in the watershed, the watershed management program could benefit from the OPPR's extensive technical assistance and training programs. The program also maintains the state's *Toxics Release Inventory*, which provides information on what chemicals are produced and disposed of within watersheds. In exercising their "right to know," citizens are empowered with valuable information on the public health and environmental risks within their watershed. The *Toxic Release Inventory* is an effective tool in encouraging public participation and fostering public education.
- 💧 *Small Business Assistance Program:* This program helps guide businesses through the process of getting permits or claiming exemptions. It provides plain-language information on pollution prevention techniques for specific industries, as well as the forms and instructions that businesses need to fully comply with environmental regulations. For example, the program has issued guidance to assist small businesses in the safe handling of hazardous waste. To encourage voluntary compliance and innovative solutions, CRP contractors could encourage stakeholders who run small businesses to seek help from the program in understanding the environmental rules with which they must comply and the effect of their operations on environmental quality within their watershed.
- 💧 *Local Government Assistance Program:* This TNRCC program is a valuable resource for cities and counties within a watershed. In coming into compliance, local governments could tap the program for technical assistance with permit applications and in the search for solutions to their water quality problems.

Updating the OWRM Guidance Manual

Through the eventual adoption of standard operating procedures and revised work plans, the TNRCC will formally adopt guidance and recommendations provided in this document. The TNRCC considers this document to be a permanent tool for TNRCC programs to use as they coordinate their day-to-day activities with the statewide watershed management approach. The OWRM will update guidance as the implementation of the approach becomes more efficient and refined.

The first revisions to this draft document occurred in December 1996, based on comments from OWRM and EPA staff. Other revisions may occur, if deemed necessary, in response to outcomes of the tasks outlined in Table 6-1. Also, the document may be updated in fiscal year 1998 or 1999 as an outcome of more effective coordination and collaboration among programs and stakeholders through implementation of the initial phases.